

CLAIMS

I claim:

1. A method for creating a concentration cell for generating electricity comprising the steps of:

providing a first electrode having a first placement and a second electrode having a second placement; and

providing a volume of electrolyte that contacts said first electrode and said second electrode and that contains subvolumes which have higher-than-average molarities of a chemical species that is existent within said volume of electrolyte; and

providing a field that extends into said volume of electrolyte and that causes said subvolumes to be translationally displaced towards said first electrode; and

holding said volume of electrolyte and said first electrode and said second electrode in stationary position relative to said field, so that the translational displacement of said subvolumes increases the molarity of said chemical species near the surface of said first electrode.

2. The method of claim 1 wherein said field is magnetic.

3. The method of claim 1 wherein said field is electric.

4. The method of claim 1 wherein said field is gravitational.

5. The method of claim 1 wherein said field is a combination of two or more of electric, magnetic, and gravitational fields.

6. A method for creating a concentration cell for generating electricity comprising the steps of:

providing a first electrode having a first placement and a second electrode having a second placement; and

providing a volume of electrolyte that contacts said first electrode and said second electrode and that contains subvolumes which have higher-than-average molarities of a chemical species that is existent within said volume of electrolyte; and

placing one or more field sourcing units in a predetermined arrangement relative to said first electrode such that said field sourcing units create a field that extends into said volume of electrolyte, that focuses towards said first electrode, and that causes said subvolumes to be translationally displaced; and

maintaining said volume of electrolyte, said first electrode, said second electrode, and said field sourcing units in stationary position relative to each other so that the translational displacement of said subvolumes by said field causes a change in the molarity of said chemical species in a localized region of said volume of electrolyte where said first electrode is placed.

7. The method of claim 6 wherein said field sourcing units are magnets.
8. The method of claim 6 wherein said field sourcing units are electrets.
9. The method of claim 6 wherein said field sourcing units are a combination of magnets and electrets.
10. The method of claim 6 further including the step of encasing said field sourcing units in an inert substrate.
11. The method of claim 10 further including the step of placing said first electrode onto the surface of said substrate.
12. The method of claim 6 wherein said step of placing field sourcing units includes using said field sourcing units as said first electrode.
13. The method of claim 12 further including the step of mounting said field sourcing units into an inert substrate.
14. The method of claim 6 wherein said step of placing field sourcing units includes coating said field sourcing units with the material of said first electrode.
15. The method of claim 14 further including the step of mounting the coated field sourcing units into an inert substrate.